

40W Constant Current Mode LED Driver

IZC095-040M-9067C-SAL

Product Overview

IZC095-040M-9067C-SAL is a 40W AC/DC LED driver with constant current output. It operates from 90~305VAC. Thanks to the efficiency of up to 89%, with the fan less design, this LED driver is able to operate between -40°C ~ +80°C under free air convection. The driver is rated with IP67 ingress protection level and is suitable to work for a variety of applications at dry, damp or wet locations. It is also equipped with a 3 in 1 dimming function so as to provide the design flexibility for LED lighting system.



Key Features

- Constant current mode output
- Plastic housing with Class II design
- Built-in active PFC function
- Class 2 power unit
- IP67 rating for indoor or outdoor installations
- Function 3 in 1 dimming
- Typical lifetime > 50000 hours

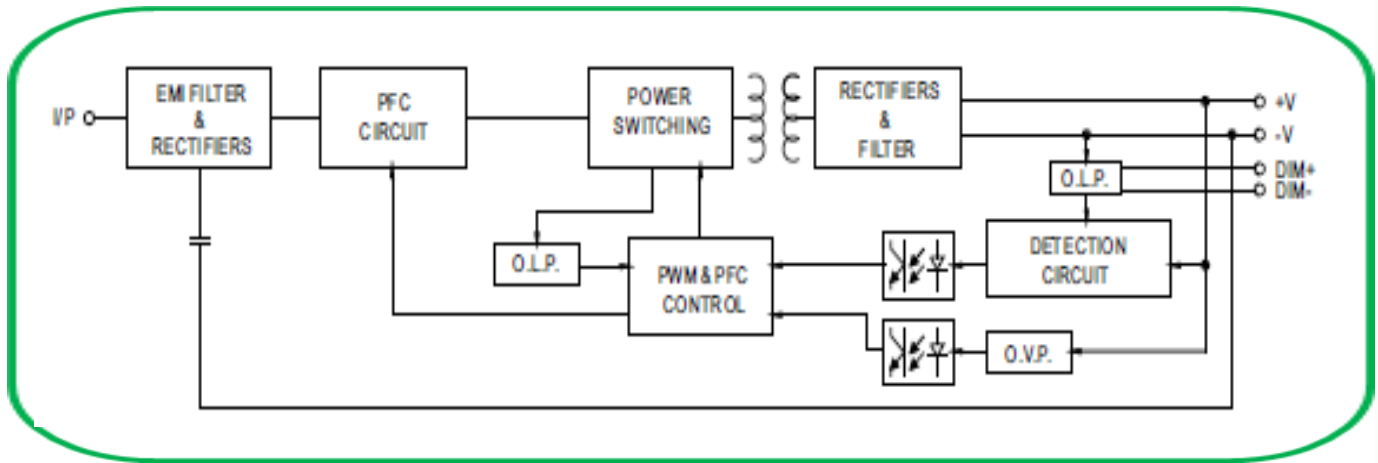
Applications

- LED panel lighting
- LED downlighting
- LED decorative lighting
- LED tunnel lighting
- Moving signs

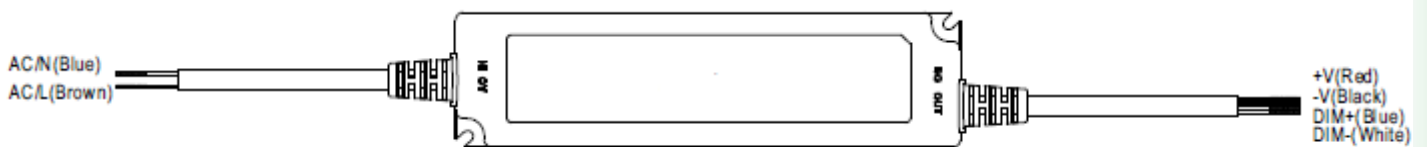
Product Specification

Output	DC Voltage	25.2-42V
	Rated Current	950mA
	Rated Power	40W
	Current Ripple	5.0% max. @ rated current
	Setup, Rise Time	1000ms, 80ms / 115VAC 500, 80ms / 230VAC
	Hold Up Time	16ms/230VAC 16ms 115VAC
Input	Voltage Range	90 ~ 305VAC
	Frequency Range	47 ~ 63 Hz
	Power Factor	PF \geq 0.97/115VAC, PF \geq 0.95/230VAC, PF \geq 0.92/277VAC@full load
	Total Harmonic Distortion	THD< 20%(@load \geq 60%/115VAC,230VAC; @load \geq 75%/277VAC)
	Efficiency	89%
	AC Current	0.6A / 115VAC 0.3A / 230VAC 0.25A/277VAC
	INRUSH CURRENT(Typ.)	COLD START 50A(width=210 μ s measured at 50% peak) at 230VAC; Per NEMA 410
	MAX. No. of PSUs on 16A CIRCUIT BREAKER	12 units (circuit breaker of type B) / 20 units (circuit breaker of type C) at 230VAC
Protection	Leakage Current	<0.75mA / 240VAC
	Over Current	95 ~ 108% Constant current limiting, recovers automatically after fault condition is removed
	Short Circuit	Hiccup mode, recovers automatically after fault condition is removed.
	Over Voltage	46 ~ 54V Shut down o/p voltage, re-power on to recover
Environment	Over Temperature	Shut down o/p voltage, re-power on to recover
	Working Temp.	Tcase=-40 ~ +80°C
	Max. Case Temp.	Tcase=+80°C
	Working Humidity	20 ~ 95% RH non-condensing
	Storage Temp., Humidity	-40 ~ +80°C, 10 ~ 95% RH
	Temp. Coefficient	\pm 0.03%/°C(0 ~ 50°C)
Safety & EMC	Vibration	10 ~ 500Hz, 5G 12min./1cycle, period for 72min. each along X, Y, Z axes
	Safety Standards	UL8750, CSA C22.2 No. 250.0-08(except for 48V, 54V), ENEC EN61347-1, EN61347-2-13 independent, EN62384, IP67, J61347-1, J61347-2-13 approved ; design refer to UL60950-1, TUV EN60950-1
	Withstand Voltage	I/P-O/P:3. 75KVAC
	Isolation Resistance	I/P-O/P:100M Ohms / 500VDC / 25°C/ 70% RH
	EMC Emission	Compliance to EN55015,EN61000-3-2 Class C (@load \geq 60%) ; EN61000-3-3
Other	EMC Immunity	Compliance to EN61000-4-2,3,4,5,6,8,11; EN61547, light industry level (surge immunity Line-Line 2KV)
	MTBF	1144.7K hrs min. Telcordia SR-332 (Bellcore) ; 394.9Khrs min. MIL-HDBK-217F (25°C)
	Dimensions	162.5 x 43 x 32mm (L x W x H)

Block Diagram

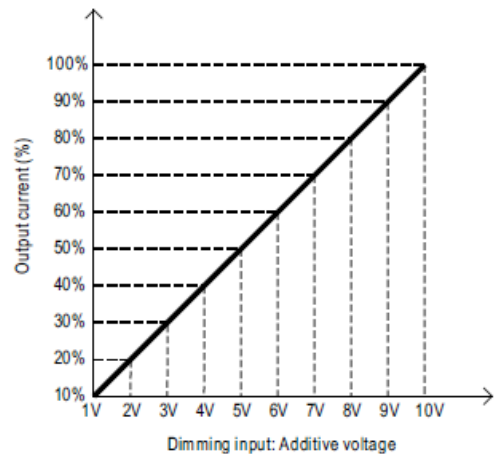
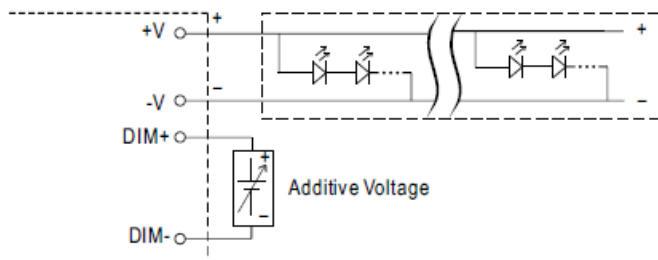


Dimming Operation

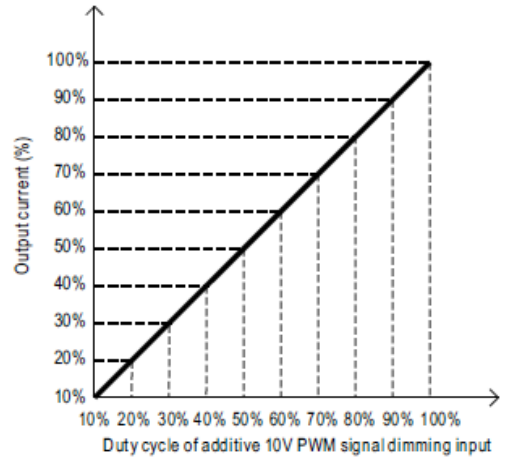
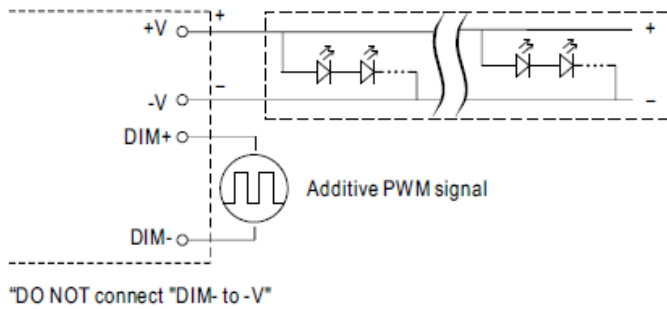


- Output constant current level can be adjusted by applying one of the three methodologies between DIM+ and DIM-: 1 ~ 10VDC, or 10V PWM signal or resistance.
- Direct connecting to LEDs is suggested. It is not suitable to be used with additional drivers.
- Dimming source current from power supply: 100µA (typ.)

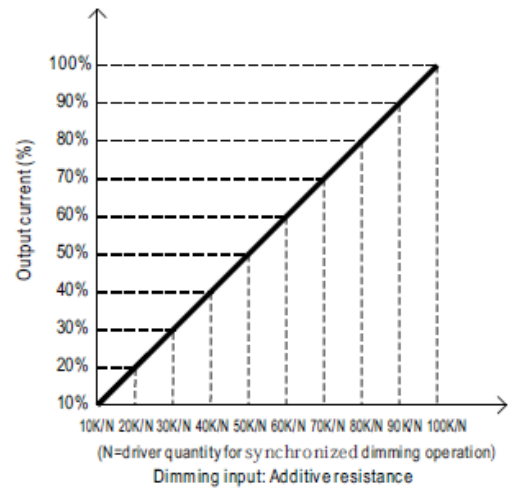
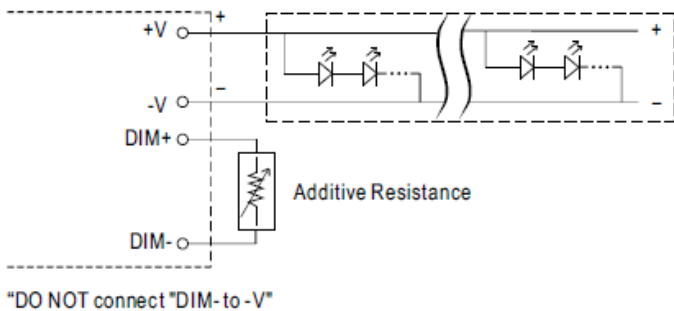
☉ Applying additive 1 ~ 10VDC



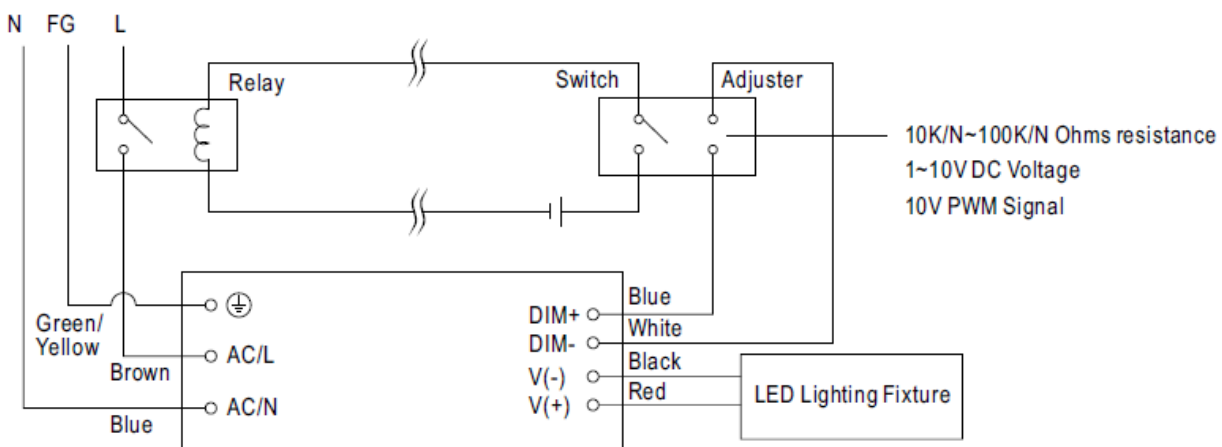
⊙ Applying additive 10V PWM signal (frequency range 100Hz ~ 3KHz):



⊙ Applying additive resistance:

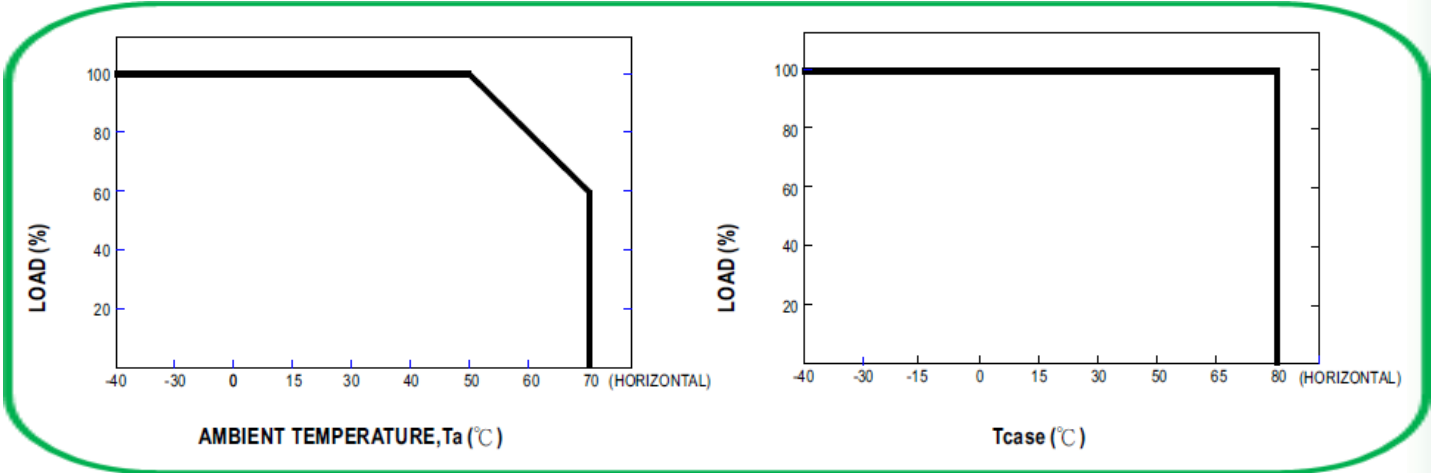


Note: In the case of turning the lighting fixture down to 0% brightness, please refer to the configuration as follow, or please contact ILS for other options.

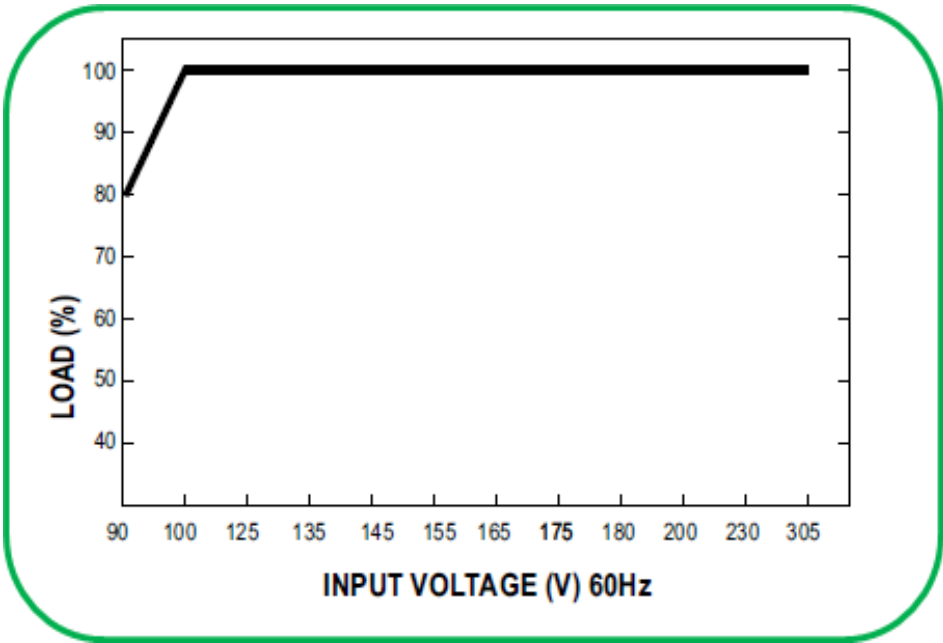


Using a switch and relay can turn ON/OFF the lighting fixture.

Output Load vs Temperature

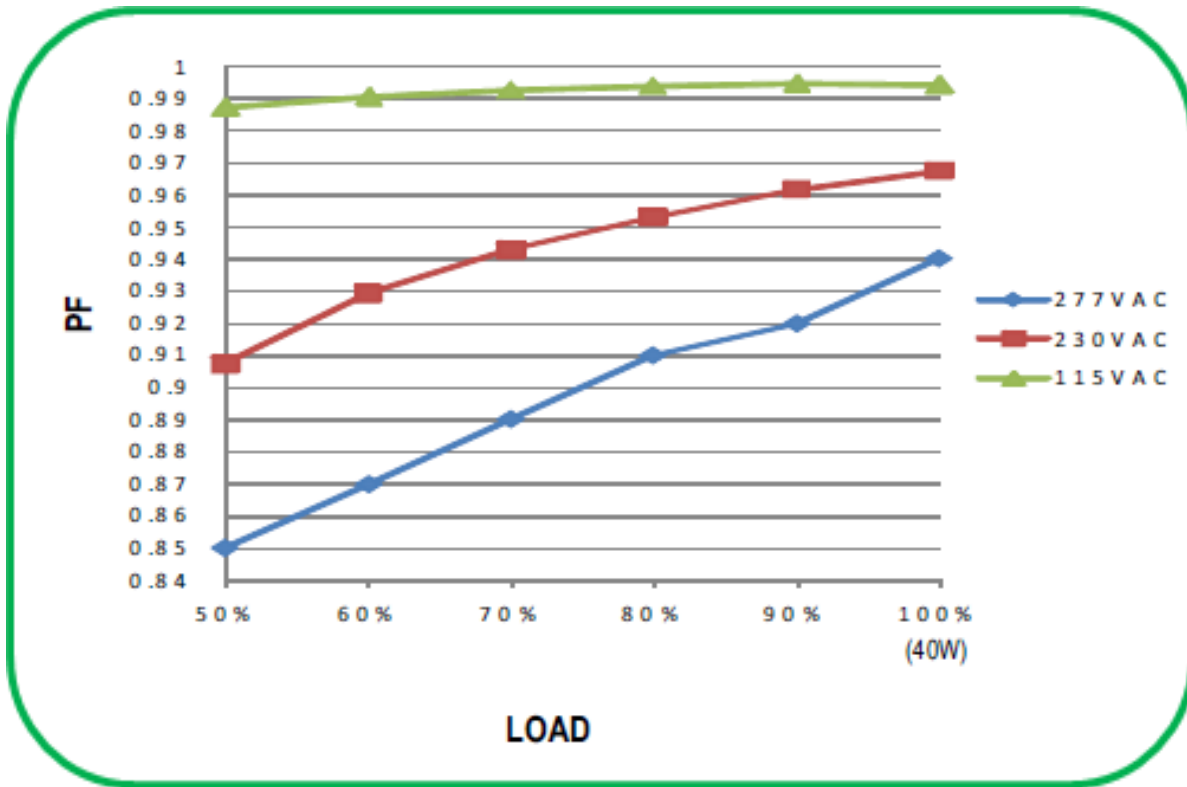


Static Characteristic

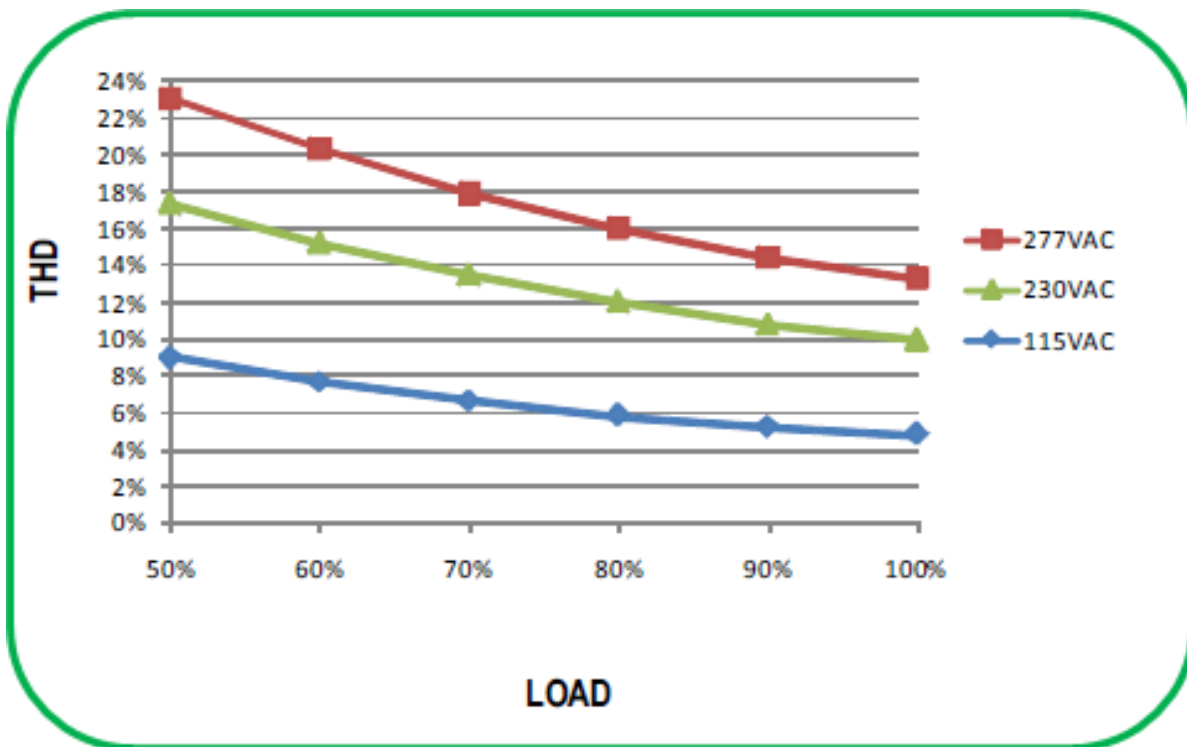


*De-rating is needed under low input voltage.

Power Factor Characteristic

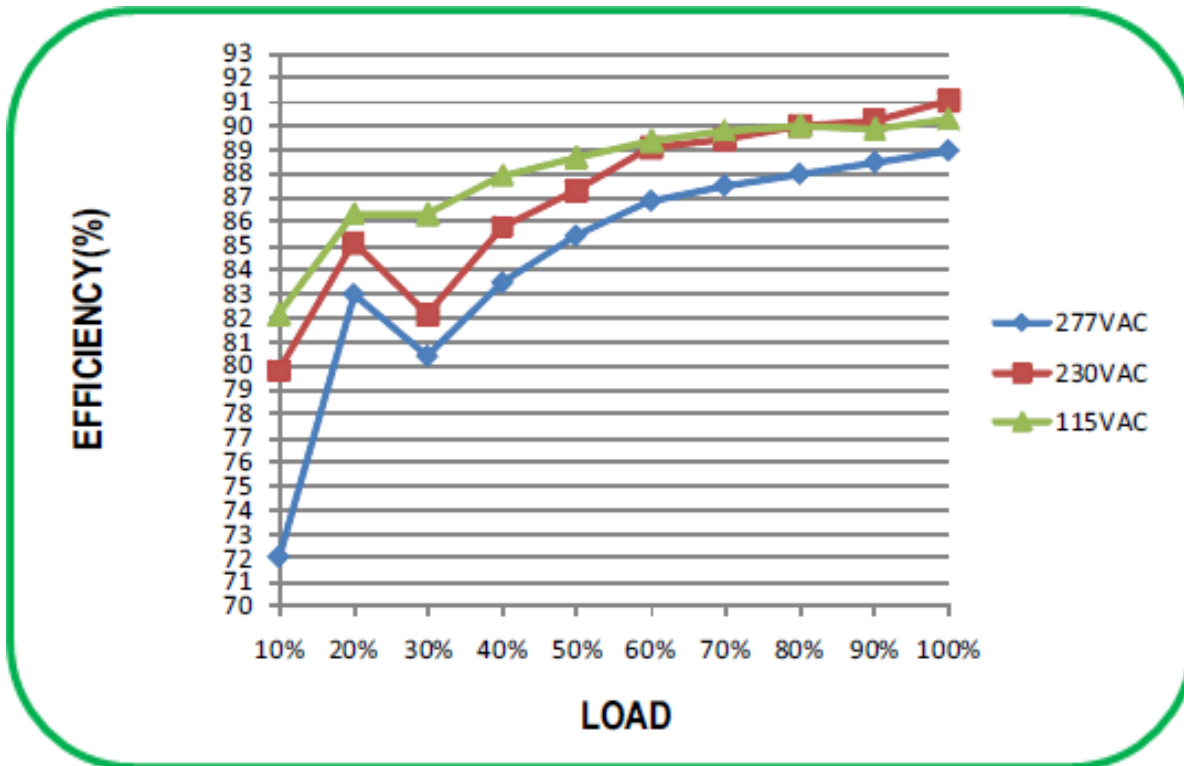


Total Harmonic Distortion

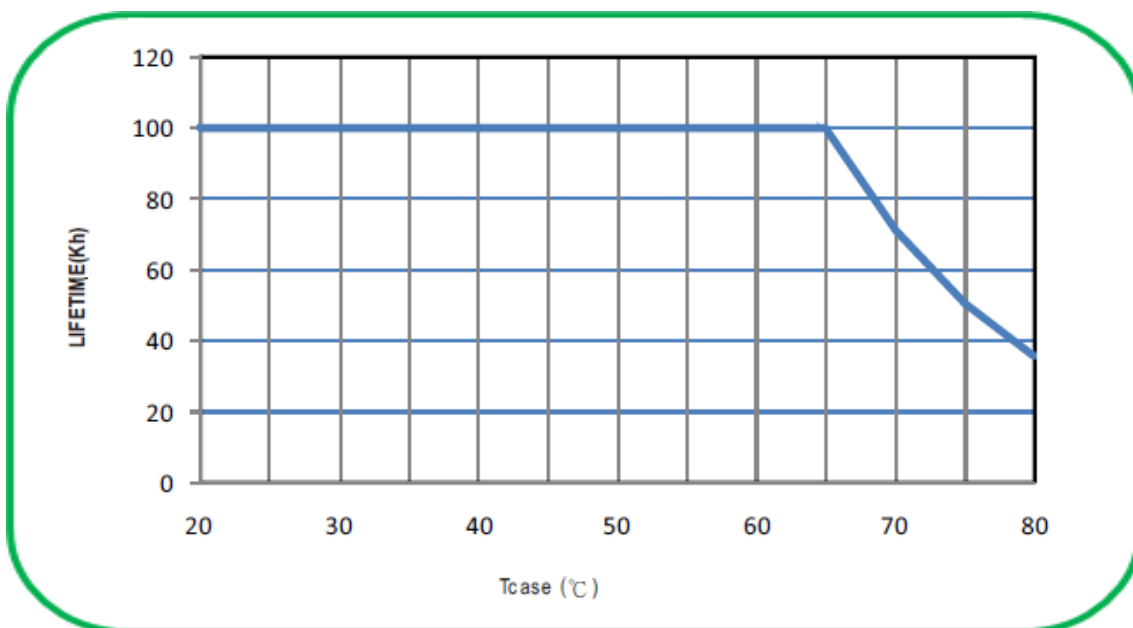


Efficiency vs Load

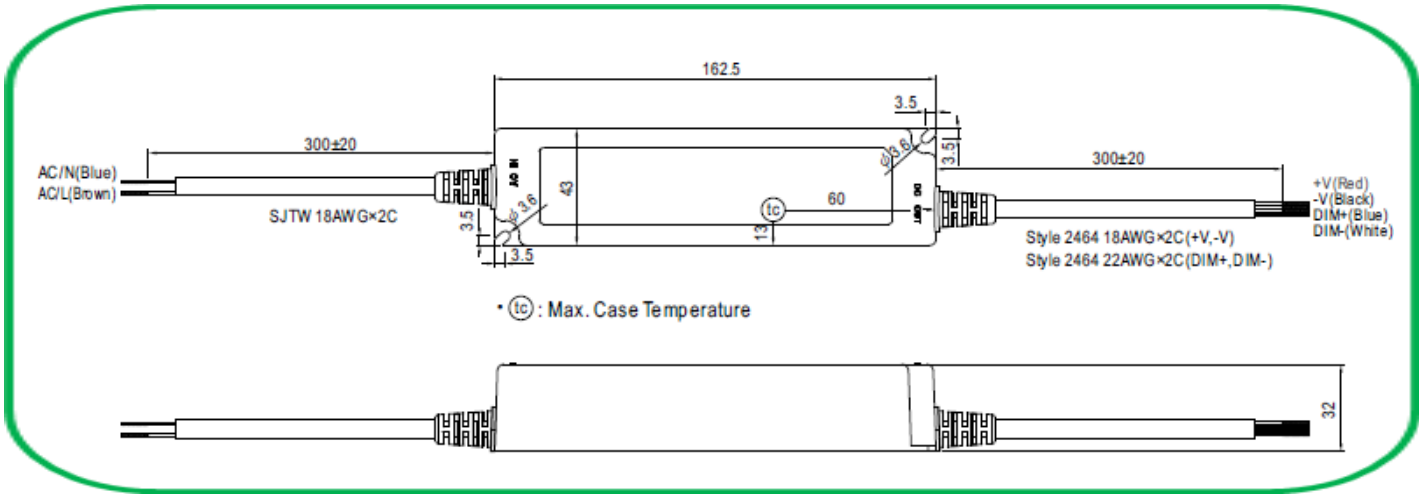
IZC095-040M-9067C-SAL possesses superior working efficiency that up to 89% can be reached in field applications.



Life Time



Technical Drawing



For further information please contact ILS

The values contained in this data sheet can change due to technical innovations. Any such changes will be made without separate notification.